

Abstract of the Disclosure

A heating vessel comprises a chamber having enclosed sides, a thermally conductive bottom end and a top end forming an opening for the introduction and extraction of contents to be heated, the bottom end having an external bottom side. A heater comprises a heat exchanger and a heat source having a heat outlet disposed at a fixed distance from the external bottom side and configured to deliver heat to a central area thereof. The heat exchanger includes a series of thermally conductive radially disposed fins are coupled circumferentially about the central area of the external bottom side, the fins extending for a fixed distance to encase the heat outlet. A gas flow path is formed to allow intake of air and output of exhaust.